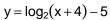
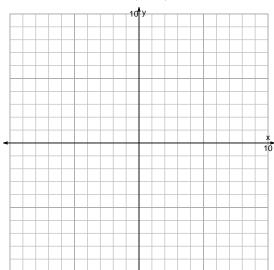
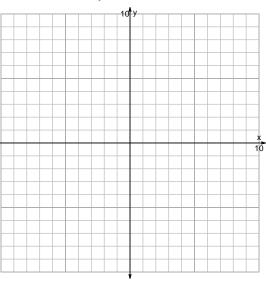
s18quiz: EXP LOG (QUIZ v217)

1. Graph $y = \log_2(x+4) - 5$ and $y = 2^{x+4} - 3$ on the grids below. Also, draw any asymptotes with dotted lines.





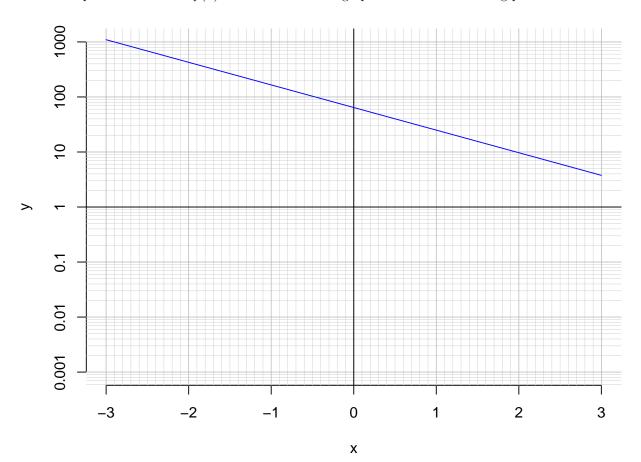
$$y = 2^{x+4} - 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-5}{4}\right) \cdot 10^{7t/3}$$

3. An exponential function $f(x) = 64.3 \cdot e^{-0.946x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.7).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(200)$.